

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P205712

Luminaire Tested: **LD4B20D010 EU4B10209040 4LBSH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P205712
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35319)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD4B20D010 EU4B10209040 4LBSH1
Description: PORTFOLIO 4 INCH SHALLOW RECESSED DOWNLIGHT
SHALLOW DISTRIBUTION WITH SEMI-SPECULAR CLEAR TRIM
WATTAGE D010TR-21.86W DE010-20.46W D5LT-21.24W DMX-20.89W DL2-22.5W
DL3-21.8 6W DLE-22.46W
Light Source: HIGH LUMEN LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1725.5 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.06 / 1.17
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

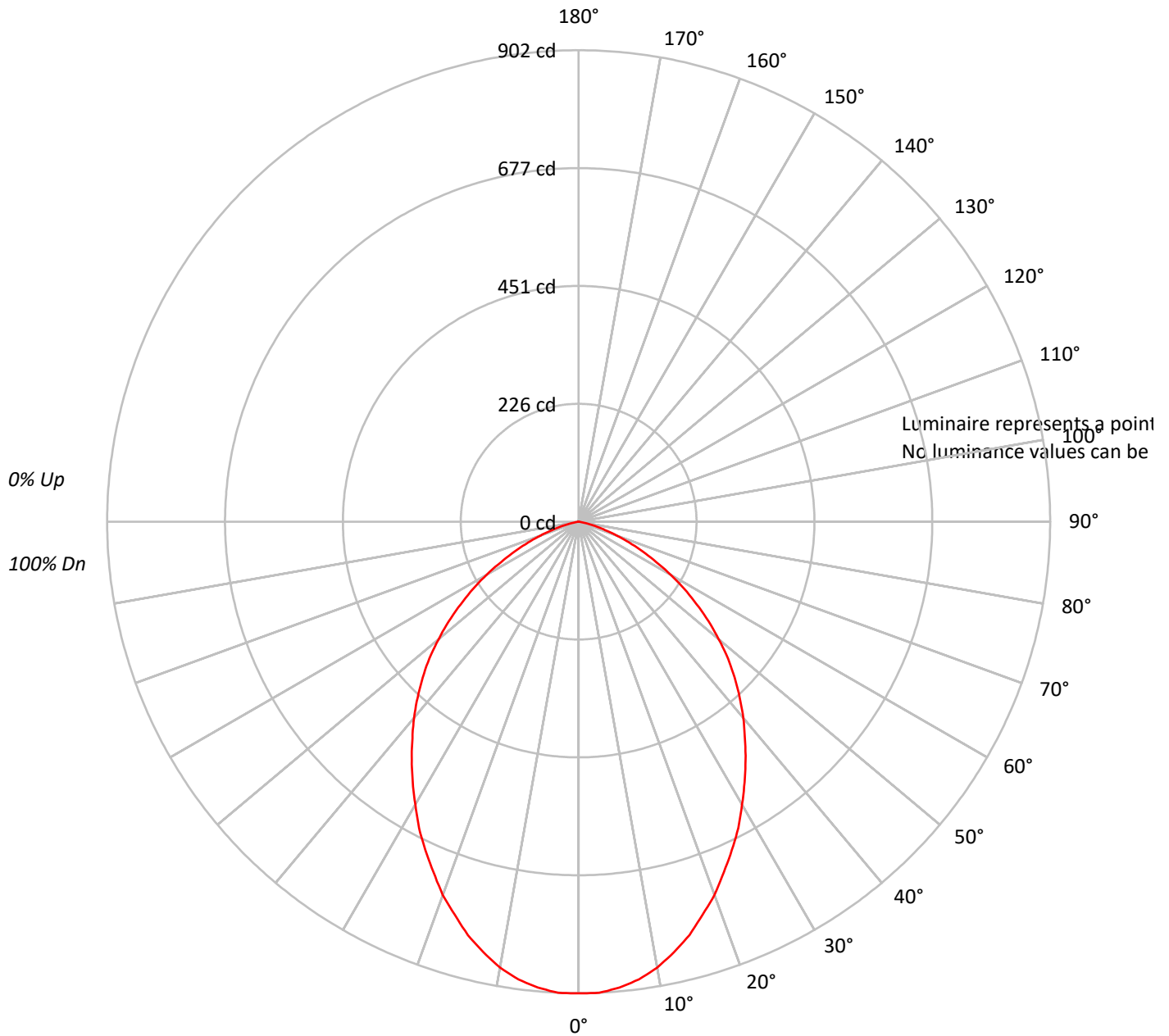
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





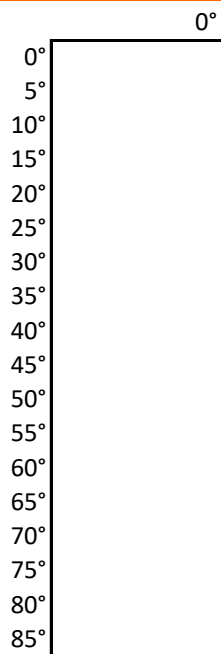
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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	102	96	90	85	100	94	88	84	90	86	82	87	83	80	84	81	79	77		
3	95	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	69	67		
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	69	64	60	58		
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	51		
6	75	63	55	49	73	62	54	49	60	54	49	59	53	48	57	52	48	46		
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41		
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37		
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	40	35	34		
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31		

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.5	4.9
10°-20°	229.7	13.3
20°-30°	319.0	18.5
30°-40°	348.1	20.2
40°-50°	324.8	18.8
50°-60°	246.5	14.3
60°-70°	135.0	7.8
70°-80°	37.1	2.2
80°-90°	0.5	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	633.3	36.7
0°-40°	981.5	56.9
0°-60°	1552.8	90.0
0°-90°	1725.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1725.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	902	
5°	895	85
15°	819	230
25°	693	319
35°	557	348
45°	422	325
55°	276	247
65°	135	135
75°	32	37
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	902.4
2.5°	902.4
5°	894.8
7.5°	883.4
10°	866.3
12.5°	843.5
15°	818.8
17.5°	788.4
20°	759.9
22.5°	725.7
25°	693.4
27.5°	661.1
30°	625.0
32.5°	590.8
35°	556.6
37.5°	522.4
40°	490.1
42.5°	455.9
45°	421.8
47.5°	387.6
50°	349.6
52.5°	313.5
55°	275.5
57.5°	239.4
60°	203.3
62.5°	167.2
65°	134.9
67.5°	104.5
70°	77.9
72.5°	53.2
75°	32.3
77.5°	15.2
80°	3.8
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)